CLAIMS

- 1. (Currently Amended) A method of allocating processing capacity of processors in a radio network controller, the method comprising the steps of:
 - (a) monitoring for a message of a connection between a user element and a network;
- (b) determining whether the message is (i) a call set-up message from the user element or (ii) an allocation message from one of the processors; and
- (c) allocating: (c1) if the message is a call set-up message, then allocating one of the processors to the connection in accordance with a load-balancing algorithm; [[,]] and
- (c2) if the message is an allocation message, then allocating a set of spreading codes to the connection with the same spreading factor and sending the set of spreading codes to a call-processing application on the processor that sent the allocation message.
- 2. (Previously Presented) The invention of claim 1, wherein step (c1) further comprises the step of providing, by the one of the processors, a call-processing application to the connection.
- 3. (Previously Presented) The invention of claim 1, wherein step (c1) further comprises the step of measuring a utilization of each of the processors.
- 4. (Previously Presented) The invention of claim 3, wherein step (c1) allocates the one of the processors based on a call-context amount per CPU load-balancing algorithm.
- 5. (Previously Presented) The invention of claim 1, wherein step (c2) further comprises determining the set of spreading codes with the same spreading factor.
- 6. (Previously Presented) The invention of claim 5, wherein, for step (c2), the set of spreading codes depends on the number of legs for soft-handover/soft-handoff of the connection.
- 7. (Original) The invention of claim 1, wherein, for step (a), the message of the connection is of a network operating in accordance with at least one of a General Packet Radio Service (GPRS) standard, Universal Mobile Telecommunications Systems (UMTS) network standard, and a Code Division Multiple Access (CDMA) 2000 standard.
- 8. (Original) The invention of claim 1, wherein the method is implemented in a processor of a radio network controller.
- 9. (Currently Amended) A network comprising a radio network controller (RNC), the RNC comprising:

means for monitoring for a message of a connection between a user element and a network;

means for determining whether the message is (i) a call set-up message from the user element or

(ii) an allocation message from one of the processors; and

means for allocating: if the message is a call set up message, one of the processors to the connection in accordance with a load balancing algorithm, if the message is an allocation message; and

if the message is an allocation message, means for allocating a set of spreading codes to the connection with the same spreading factor and sending the set of spreading codes to a call-processing application on the processor that sent the allocation message, if the message is an allocation message.

- 10. (Currently Amended) A computer-readable medium having stored thereon a plurality of instructions, the plurality of instructions including instructions which, when executed by a processor, cause the processor to implement a method for allocating processing capacity of processors in a radio network controller, the method comprising the steps of:
 - (a) monitoring for a message of a connection between a user element and a network;
- (b) determining whether the message is (i) a call set-up message from the user element or (ii) an allocation message from one of the processors; and
- (c) allocating: (c1) if the message is a call set-up message, then allocating one of the processors to the connection in accordance with a load-balancing algorithm: [[,]] and
- (c2) if the message is an allocation message, then allocating a set of spreading codes to the connection with the same spreading factor and sending the set of spreading codes to a call-processing application on the processor that sent the allocation message.
- 11. (Previously Presented) The invention of claim 4, wherein the call-context amount per CPU load-balancing algorithm comprises:

determining an average number of calls per processor;

weighting the average number of calls per processor by a total call capacity of the processor; and

selecting the processor with the smallest weighted call average.

12. (Currently Amended) A method of allocating processing capacity of processors in a radio network controller, the method comprising the steps of:

monitoring for a message of a connection between a user element and a network; and

allocating, if the message is a call set-up message, one of the processors to the connection in accordance with a load-balancing algorithm based on a call-context amount per CPU load-balancing algorithm, wherein the call-context amount per CPU load-balancing algorithm comprises:

determining an average number of calls per processor;

weighting the average number of calls per processor by a total call capacity of the processor; and

selecting the processor with the smallest weighted call average.

- 13. (Cancelled)
- 14. (Previously Presented) A method of allocating processing capacity of processors in a radio network controller, the method comprising the steps of:

monitoring for an allocation message of a connection between a user element and a network; and allocating a set of spreading codes to the connection with the same spreading factor;

wherein the set of spreading codes depends on the number of legs for soft-handover/soft-handoff of the connection.